

### REMARKS

Claims 43-44, 46-47, 49-50, 52, and 54 stand rejected, with claims 55 and 57-63 withdrawn from consideration pursuant to Applicant's election. Applicant has amended claims 43 and 52 to more particularly define the subject matter sought to be patented and to advance prosecution, and has canceled without prejudice claims 47 and 54. The amendments add no new matter and are fully supported by the original specification. Claims 43-44, 46, 49-50, and 52 are pending, and Applicant requests reconsideration in view of the above amendments and the following remarks.

#### **Response to Claim Rejections – 35 U.S.C. § 103**

In the final office action mailed May 21, 2007, claims 43-44, 46, 49-50, 52, and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,027,499 to Johnston et al. ("Johnston"). Claim 47 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnston in view of U.S. Patent No. 6,355,029 to Joye et al. ("Joye").

#### **Claims 43-44, 46-47, and 49-50**

Applicant has amended claim 43 to include the limitations of claim 47, now canceled, and to clarify that the retractable member may move independently of the cryo therapy apparatus. The amendment adds no new matter and is fully supported by Applicant's specification (e.g., at Figs. 1, 2 and 8; at page 6, lines 3-18, page 8, lines 4-22, page 11, line 13 to page 12, line 15, and at claim 47). In particular, the description of figure 1 describes a temperature monitoring device 10 including a tubular member 14 and a temperature monitoring member 20, including a sensor slidably disposed within the tubular member, *see* page 6, lines 3-11, and a person having ordinary skill in the art viewing figure 1 would appreciate that such movement may occur independent of the cryo therapy apparatus 12. The temperature monitoring device 110 of figure 2 is described as being "substantially similar," except that an "optic sensor" may be used. *See* page 8, lines 4-7.

Johnston discloses an apparatus to treat Barrett's esophagus, a condition that is characterized by abnormal cell growth along the inner lining of the esophagus above the lower

esophageal sphincter. *See* col. 1, lines 29-30. The apparatus includes an endoscope 10 with a camera lens 14 at a distal end of the endoscope 10. *See* fig. 1B; col. 6, lines 37-45.

Joye discloses a cryosurgical balloon catheter that includes a thermocouple (24) optimally located near the center of the balloon. *See* Abstract, col. 6, lines 30-32.

Amended claim 43 is patentable over the references of record, including Johnston, Joye, or their combination, because the references fail to disclose or fairly suggest a device for minimally invasive medical treatment that includes, *inter alia*, “a tubular member,” “a cryo therapy apparatus connected to the distal end of the tubular member,” and “an optical sensor to monitor temperatures created by use of the cryo therapy apparatus, the optical sensor coupled to a retractable member capable of moving independently of the cryo therapy apparatus.” The Office Action acknowledges that Johnston fails to disclose “retractable optical temperature sensors.” *See* Office Action page 4. Joye also does not disclose or suggest an “optical sensor coupled to a retractable member,” and further does not disclose or suggest such an optical sensor and retractable member “capable of moving independently of the cryo therapy apparatus,” as recited in amended claim 43. In contrast, Joye discloses a thermocouple (24) attached to a cryogenic device (diffuser 100 in figure 9, diffuser 82 in figure 7). As such, the Joye thermocouple is not capable of moving independently of a cryo therapy apparatus.

Neither is claim 43 obvious in view of the references of record. For example, advantages associated with some implementations of the claim 43 device are not contemplated by either Johnston or Joye. As one example, some implementations of the device recited in claim 43 may permit precise positioning of the optical sensor by manipulating the retractable member, which member may be moved independently of the cryo therapy apparatus. This may permit, for example, the cryo therapy apparatus to be positioned near a target region, and the optical sensor to be moved to one or more appropriate locations to monitor temperatures created by use of the cryo therapy device without moving the already-located cryo therapy device.

For at least these reasons, amended claim 43 is patentable over the references of record, as are dependent claims 44, 46, and 49-50. Applicant requests withdrawal of the rejections of these claims.

### Claims 52 and 54

Applicant has amended claim 52 to include the limitations of claim 54, now canceled, and to clarify that the cryo therapy apparatus includes an inner chamber and an outer chamber, where the outer chamber is arranged and configured to prevent loss of coolant if the inner chamber fails. The amendment adds no new matter and is fully supported by Applicant's specification (e.g., at Fig. 8; at page 11, line 13 to page 12, line 15). As recited in Applicant's specification, "the outer . . . chamber may prevent loss of coolant into the body if the inner . . . chamber fail[s]." See page 12, lines 12-13.

Johnston does not disclose or suggest a device for minimally invasive medical treatment that includes, *inter alia*, "a cryo therapy apparatus comprising an inner chamber and an outer chamber," where "the outer chamber arranged and configured to prevent loss of coolant if the inner chamber fails," as recited in amended claim 52.

With regard to Johnston's figure 2, the Office Action contended that the catheter (20) was an "inner chamber," and that the catheter tip (46) was an "outer chamber." See Office Action, page 2; Johnston col. 6, lines 52-60; col. 7, lines 49-51. Without conceding that Johnston's catheter and catheter tip are "chambers," Applicant submits that Johnston's catheter tip is not an outer chamber of the type recited in claim 52, because the catheter tip is not "arranged and configured to prevent loss of coolant if the inner chamber fails." For example, if Johnston's catheter 20 were to fail, coolant from the catheter would leak into the body. This difference illustrates that the Johnston device differs markedly from the claimed device. For example, the Johnston device is designed to spray liquid nitrogen directly onto body tissue, *see* Abstract, in contrast to the claimed device that includes a safety feature to prevent coolant from coming into direct contact with body tissue. As such, neither would it be obvious to modify the Johnston device to include the claimed features.

For at least these reasons, claim 52 is patentable over Johnston, and Applicant requests that the Examiner withdraw the rejection of this claim.

### CONCLUSION

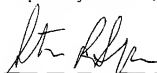
Applicant submits that each of claims 43-44, 46, 49-50, and 52 is in condition for allowance, and requests that the Examiner issue a notice of allowance.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, objection, issue or comment does not signify agreement with or concession of that rejection, objection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please charge Deposit Account No. 06-1050 in the amount of \$2,230.00 for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: June 23, 2008



Stephen R. Schaefer  
Reg. No. 37,927

Fish & Richardson P.C.  
60 South Sixth Street  
Suite 3300  
Minneapolis, MN 55402  
Telephone: (612) 335-5070  
Facsimile: (612) 288-9696